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U.S. Senate

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Committee on Environment
and Public Works

Washington, D.C.

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CHALLENGES AND IMPLICATIONS OF EPA'S PROPOSED NATIONAL AMBIENT
AIR QUALITY STANDARD FOR GROUND-LEVEL OZONE AND LEGISLATIVE
HEARING ON S. 638, S. 751, AND S. 640

WEDNESDAY, JUNE 3, 2015

U.S. SENATE

Committee on Environment and Public Works

Washington, D.C.

The committee met, pursuant to notice, at 9:32 a.m. in room 406, Dirksen Senate Building, the Honorable James Inhofe [chairman of the committee] presiding.

Present: Senators Inhofe, Barrasso, Capito, Crapo, Boozman, Sessions, Fischer, Rounds, Sullivan, Boxer, Carper, Whitehouse, Merkley, Gillibrand, Booker and Markey.

STATEMENT OF THE HONORABLE JAMES INHOFE, A UNITED STATES SENATOR
FROM THE STATE OF OKLAHOMA

Senator Inhofe. Our meeting will come to order.

We are going to have myself and the Ranking Member, Senator Boxer, give our opening statements and then refer to members by the order they come. That will mean you will be going first, Mr. Olson, in explaining what your legislation is and the same for the rest of the members as they come in.

The first hearing I ever held as Chairman of the Clean Air Subcommittee was in February 1997 on the ozone standard. It was the first of seven hearings held on what was then referred to as "the single largest environmental regulation ever proposed."

Today, we are again conducting oversight of the EPA and the proposed ozone standard, which is set between 65 and 70 parts per billion. We will hear directly from officials responsible for implementing and administering EPA's new standard.

We like to hear from people in the field who are going to be responsible for upholding all these brilliant things we do here. We want to welcome Judge/Executive Gary Moore, from Boone County, Kentucky; County Commissioner Mike McKee, from Uinta County, Utah; and Kanti Srikanth, Director of Transportation Planning for the National Capital Region Transportation Planning Board.

We are also here to examine three pieces of legislation.

The first bill, sponsored by Senator Thune and Senator Manchin, requires 85 percent of the counties that have not met the 2008 standard to achieve it before EPA can lower the standard further. Congressman Pete Olson, who has introduced the House version of this bill, is also with us today.

Additionally, Senator Flake is introducing two bills. The first extends EPA's existing timeline to review NAAQS to every 10 years. The second amends the Exceptional Events rule, which States rely on when events out of human control contribute to ozone readings exceeding the allowed level. All three of these are commonsense, good government bills that strengthen the NAAQS setting process while advancing the trend of improved air quality.

EPA's ozone proposal is the most expensive regulation in history with projected costs of \$1.7 trillion and 1.4 million lost jobs. Up to 67 percent of counties fail to meet the proposed lower standards, which means if this rule goes forward, they will face a legacy of EPA regulatory oversight, stiff federal penalties, lost highway dollars, restrictions on infrastructure investment, and increased costs to businesses.

The costs and burdens associated with expanding roads and bridges will be exponential. Further concerning is that EPA's proposal does not even account for high levels of naturally-occurring ozone present or transported in many parts of the

Country, which is why pristine national parks like the Grand Canyon and Yellowstone would be placed in nonattainment status.

Looking at my home State of Oklahoma, significantly, not a single county violates the current standard, but under this new standard, all 77 of my counties in Oklahoma would be out of attainment as you can see on this map. Currently, we are in attainment in every county. That is what would happen in my State of Oklahoma.

We have spent a significant amount of time and valuable State resources to comply with the 2008 standard, but will have to spend an additional \$35 billion to meet EPA's new standard should this become reality. Each household will lose an average of \$900 a year, and the State will lose 35,503 jobs with \$18 billion in lost GDP. Every State is facing similar losses.

In 2011, EPA proposed a standard remarkably similar to the one we are discussing today. The President rejected it then because, as he said, our economy could not handle the burden of its substantial price tag. Has our economy really improved so much in the last few years that we can easily absorb a \$1.7 trillion price tag? I would say no.

Even Steve Beshear, the Democratic Governor of Kentucky, agrees. He has pledged to reduce carbon emissions in his State by 80 percent by 2050. Yet, he wrote President Obama and asked him to keep the ozone standard where it is because of the

detrimental impact it would have on Kentucky job creators and manufacturers.

That is kind of interesting, isn't it, because you have the Governor, who is 70 years old, who said we will comply by 2050 with the standard in terms of emissions. He would be 105 years old, so it is easy to say you will comply with that. Everyone keep that in mind.

I have always stood in favor of clean air. I was an original co-sponsor of the 1990 Clean Air Act Amendments and Clear Skies, but this proposal, like many of the EPA's recent proposals, will have negligible environmental benefits.

It is based on questionable health benefits and comes with unequivocal economic costs. Instead of creating a new regime of costly, job-killing mandates, the EPA should focus its efforts on helping counties that have not yet met the 1997 and the 2008 standards. A new standard at this time is not only irresponsible, but also impractical and economically destructive.

Senator Boxer?

[The prepared statement of Senator Inhofe follows:]

STATEMENT OF THE HONORABLE BARBARA BOXER, A UNITED STATES
SENATOR FROM THE STATE OF CALIFORNIA

Senator Boxer. Okay. Here we go. The debate in this committee continues. It is a healthy one, by the way.

Today we examine the critically important steps that the Obama Administration is taking to strengthen the ozone standard, which will save lives and protect the health of our children and families. You never heard that from my chairman. He does not talk about the impact of smog on our families and I will.

We know that ground-level ozone, often referred to as smog, is extremely harmful to human health. It is not a debatable point. Everyone agrees.

It is hard for me to believe that in this Environment Committee, we would be looking at not making further steps that are required under the law to protect our families from smog. We know too much exposure to smog leads to cardiovascular disease, respiratory ailments like asthma, emphysema, and premature death. That is all known.

It is our youngest and oldest generations, as well as those who spend the most time outdoors, who are the most vulnerable to the impacts of smog pollution. According to the Environmental Protection Agency, there are nearly 26 million people in the U.S. who have asthma.

I always say to my colleagues, when you visit a school to

talk to the kids, ask them how many have asthma or know someone with asthma. I guarantee you 60 percent will raise their hands because we know there are 7.1 million children in our Nation who have asthma.

The National Ambient Air Quality Standards are the backbone of the Clean Air Act. They set the maximum level of an air pollutant, such as ozone, that is safe for us to breathe. Everyone has a right to know that the air they breathe is safe, because if they cannot breathe, they cannot go to school, they cannot work, they get sick, they go to the emergency room, and they do not have the quality of life they have a right to have.

The Clean Air Act requires, by the way, brought to you by a Republican President a long time ago and updated by a Republican President, requires that these standards be set solely on the best available health science.

To ensure the health impacts of air pollution continue to be addressed, EPA is required to review the standards every five years. No matter what my Republican colleagues may try to claim today, scientists overwhelmingly agree that EPA needs to adopt a stricter standard to protect the health of the American people, especially our children and the elderly. We have known since 2008 that the current ozone standard is too weak to protect the health of our families.

Last year, EPA proposed updating and strengthening the

ozone standard from 75 parts per billion to a more protective range, between 65 and 70 parts per billion. It is also considering an even more protective standard of 60 parts per billion.

The EPA is doing what it must do. Otherwise, they will be hauled to court. They have to make sure our families are protected.

I have great news for those of you who want to see EPA continue to do their job. Just yesterday, the U.S. Court of Appeals for the District of Columbia Circuit found that the EPA has complied with the Constitution in enforcing the ozone standards. Say what you might say, they are on the side of the Constitution. They are on the side of the public health.

Here is where we stand. We have a number of bills before us that will decimate this rule. That is their purpose. I do not question my colleagues who have written these bills, but I would urge them to check out the number of kids in their States and the number of senior citizens who will have problems if we do not clean up the ozone.

The American people strongly support a tighter ozone standard. Last November, the American Lung Association found that 68 percent of voters nationwide support strengthening the ozone standards, including 54 percent of Republicans.

How out of step can you be than to move forward with a bill

that is going to stop us from protecting the health of our families? You are out of step. You are out of touch. Get real about it. These bills will have a negative effect.

I am going to stop there, I am sure you are happy to know, and welcome all of our witnesses, regardless of their point of view.

I want to extend a very special welcome to one of our witnesses, Larry Greene, the Executive Director of the Sacramento Air Quality Management District. Larry, thank you so much.

California is on the front lines in the battle against air pollution. He will testify about the tremendous successes our State is having in implementing new air pollution standards.

With that, I would ask to put the rest of my statement in the record. Thank you very much, Mr. Chairman, for your kindness and allowing me to be your counterpoint.

[The prepared statement of Senator Boxer follows:]

Senator Inhofe. Thank you, Senator Boxer.

As we stated earlier, as they come in, the sponsors of the legislation will be heard to explain. Maybe they disagree with Senator Boxer as to the purpose of your legislation and if so, feel free to say so.

I will recognize you, Mr. Olson. Thank you for coming across the campus.

STATEMENT OF THE HONORABLE PETE OLSON, A REPRESENTATIVE IN
CONGRESS FROM THE STATE OF TEXAS

Mr. Olson. Thank you, Chairman Inhofe, Ranking Member Boxer and committee members for allowing me to speak to you this morning.

I have worked on Capitol Hill, this side, for ten years, two on active duty in the Navy, four for Senator Phil Gramm, and four as John Cornyn's first Chief of Staff. I know your time is precious. I will be very brief.

I will describe the bills I have introduced about ozone with support from your fellow colleagues here in the Senate.

My hometown of Houston, Texas has a great story to tell about ozone. When I moved there in 1972, we had the highest ozone levels in America. Hard work and lots of money have put us on track to be in full attainment for ozone in the next few years. We have driven down the field and are about to kick the field goal to win, but EPA is moving the goal posts.

Nature produces ozone, so levels can only go so low. Much of the factors adding to our ozone are out of our control. We have ozone coming from China or annual crop burnings in Mexico.

EPA calls ozone we cannot control "background ozone." They admit that half of the ozone in America is beyond our control. Yet, EPA's new proposed standard for ozone is approaching background levels.

Many parts of our Country, farms and ranches, have very little ozone they can control. EPA tells them the tools needed to comply are, again, "unknown." Healthy air and healthy water are priority one.

Impossible rules help no one and they can hurt. The Texas manufacturing sector employed 875,000 and generated over \$200 billion in GDP a few years ago. The proposed new ozone standards will stop growth and jobs will be lost. This will not be limited to Houston. The whole Nation will feel the pain.

That is why I teamed up with Republican conference chairman, John Thune, to introduce the CASE Act, the Clean Air, Strong Economies Act. The CASE Act simply requires EPA to determine the impact of new clean air standards on the economy and jobs. It also allows States to achieve current standards before changes are made.

The other bill I want to discuss is the CLEER Act, the Commonsense Legislative Exceptional Events Reform Act.

Jeff Flake has introduced the same bill here in the Senate. As ozone standards are lowered, spikes and emissions beyond our control can push an area out of attainment. My home State has been waiting for four years for EPA to respond to a request for the massive fires near Bastrop in 2011.

EPA has admitted the Exceptional Events Rule needs reform. The CLEER Act is a step in that direction.

Thank you for your time and your consideration.

[The prepared statement of Mr. Olson follows:]

Senator Inhofe. Thank you very much.

I know that Senator Thune will be here to talk about the same legislation. Are you handling both legislations from Senator Thune and Senator Flake on the House side?

Mr. Olson. Yes, sir.

Senator Inhofe. It is very nice to have you here.

Senator Flake?

STATEMENT OF THE HONORABLE JEFF FLAKE, A UNITED STATES SENATOR
FROM THE STATE OF ARIZONA

Senator Flake. Thank you, Mr. Chairman, Ranking Minority Member and all the members. Thank you for allowing me to come here and talk about the CLEER Act and the ORDEAL Act.

As Pete mentioned, with the CLEER Act, we are looking to simply bring some commonsense to the EPA's approach.

My family has been in Arizona since 1878 when it was a territory. The dust storms we are talking about rolled through the territory at that time, they do today and will long after my family is gone.

Senator Inhofe. And go straight from there to Oklahoma.

Senator Flake. That is right. It is much like tornadoes in the Midwest or elsewhere or hurricanes. It is simply a natural event. The problem is the EPA simply will not treat it as such.

The CLEER Act will simply ease the regulatory burden of States, including arid States like Arizona, from these exceptional events.

When these dust storms occur, they cause a spike in the particulate level and this blip will have a dramatic regulatory impact on the States. They will be found in noncompliance, even though, as I mentioned, it is no fault of their own. Due to federal air quality standard regulations, it leads to penalties

like loss of federal transportation dollars.

Faced with repercussions they did nothing to cause, States dedicate vast amounts of manpower, countless work hours, and considerable financial resources to reviewing these events that, as I mentioned, they do not control.

For example, the Arizona Department of Environmental Quality, the Maricopa County Air Quality Department, and the Maricopa Association of Governments in 2011 and 2012, spent about \$675,000 and 790 staff hours to prove that the spike in PM 10 levels was caused by a dust storm and not by pollution. Again, they spent \$675,000 and 790 staff hours just to say it was a dust storm.

Historically, EPA's reviews under this exceptional event rule have been arbitrary, cumbersome and costly. They have lacked an appeals process. We are simply saying let us introduce a little commonsense. The CLEER Act would simply require a rulemaking and that decisions on such events be based on the preponderance of evidence. It would accord deference to the State's own findings of such when such an event happened.

It would also require the EPA to review States' exceptional events documentation within a reasonable time period. As Pete mentioned, you wait and wait and wait for the EPA to actually review this. They drag it out and as I mentioned, there is no appeals process.

As if being wrapped around this regulatory axle is not enough, Arizona will soon face the already stringent air quality standard for ozone. That is why I have introduced the ORDEAL Act.

When the EPA reduced ozone standards in 2008, as we know, counties across the Country that were in nonattainment were forced to enact further expensive and complicated compliance plans. Now relying on what I think we all can accept are some dubious scientific bases, the EPA has proposed lowering the ozone emissions standards even more to 65 ppb while accepting comments, as mentioned, to lower it even further to 60 ppb.

By some estimates, as I am certain the committee is aware, the proposal of the lower ozone level may be the most expensive regulation in history, as the Chairman mentioned, costing as much as \$1.7 trillion. Lowering ozone standards from 75 ppb to 65 ppb would cost a whopping \$140 billion annually.

EPA's own science advisors disagree on the very basis of this regulation. Simply put, the lowering of the ozone standard is unnecessary. U.S. air quality has been improving for the past three decades. Since 2000, air quality has improved by 18 percent due to lower ozone levels.

We all recognize, as Pete said, we would love to have lower ozone levels. A lot of that is natural and occurs naturally. We all accept that you could not lower it to 45 ppb. That would

be just unreasonable. There are some standards that are reasonable and some standards that are not.

It is not that we all do not want the same goal of cleaner air. We just have to figure out what that standard is.

As mentioned, there is a five year review process. The ORDEAL Act would give States flexibility and time to implement their own innovative and proactive measures. The bill, most importantly, would extend all air quality standards review, including ozone, to a ten-year timetable instead of the current five-year period. That would give a little leeway and allow States and all of us to breathe a little easier.

Thank you for your time.

[The prepared statement of Senator Flake follows:]

Senator Inhofe. Thank you, Senator Flake.

Senator Thune, before you came in, we commented that Congressman Olson is introducing similar legislation to all three pieces we are hearing today. You are recognized to explain yours.

STATEMENT OF THE HONORABLE JOHN THUNE, A UNITED STATES SENATOR
FROM THE STATE OF SOUTH DAKOTA

Senator Thune. Good morning. Thank you, Mr. Chairman Inhofe and Ranking Member Boxer for giving me the opportunity to speak in front of the committee this morning.

I want to thank all the members for the chance to talk about a bill I have introduced called the CASE Act. It is a bipartisan bill introduced with Senator Manchin that would prevent the staggering blow that a lower ozone standard would deliver to the economy at a time when many of our industries are seeking to turn the corner.

After an area is deemed in nonattainment with the smog standard, communities face stiff federal penalties, increased business costs, restrictions on infrastructure investment and lost highway dollars.

When businesses are restrained by regulatory overreach, they cannot expand, jobs are put at risk and innovation is stifled. Areas in nonattainment or even those in marginal attainment will face steep challenges in promoting economic development or attracting new businesses.

In fact, it was for these exact reasons, regulatory burdens and regulatory uncertainty, that the Obama Administration withdrew a similar proposal in 2011. The cost of a lower smog standard has hardly lessened and the hit this could have on

manufacturing and other economic sectors nationwide would be unprecedented.

The bipartisan CASE Act strikes a balance between economic growth and environmental progress by requiring the EPA to first focus on the most polluted areas that are in nonattainment with the current standard before it can implement a lower one.

We have made great progress in cleaning up our air and pollution levels are at an all time low. However, 40 percent of Americans live in the 227 counties that have not yet met the 75 ppb standard set in 2008. The CASE Act would require 85 percent of these counties to achieve compliance with the existing 75 ppb standard before the EPA can impose a stricter regulation like the one proposed in November.

The EPA needs to focus its efforts on areas already struggling with attainment where smog remains a consistent problem. We should first tackle smog where it is the worst, in places like Los Angeles and not go after regions like the Great Plains where there clearly is not a smog problem.

The EPA contends that a lower standard will benefit public health, yet most of these benefits will come from reductions of other criteria pollutants like particulate matter which are already subject to their own regulations.

Moreover, the EPA would be well served to acknowledge that it has not yet sufficiently implemented the existing 2008

standard and prioritized its efforts to combat smog in the most polluted areas.

The CASE Act would also require the EPA to consider the cost and feasibility of a lower standard which it currently does not consider. At a standard of 65 ppb, approximately 75 percent of the projected costs are attributed to unknown controls or technologies and emission reduction strategies that have yet to be developed. Hinging a regulation of this magnitude on unknown controls could hamper economic growth with staggering costs for years to come.

I want to thank you for the opportunity to come before this committee and introduce the CASE Act today. I hope you will agree that this bipartisan bill is a reasonable way forward to prioritize smog in the most polluted areas while not imposing undue costs on the American economy and workforce.

Mr. Chairman, I appreciate the opportunity to present this legislation and encourage its consideration.

Thank you.

[The prepared statement of Senator Thune follows:]

Senator Inhofe. Thank you, Senator Thune. I thank all three of you.

You are certainly welcome to stay but we will excuse you now. We will now be hearing from witnesses.

In my opening statement before you came in, Senator Thune, I pointed out that Oklahoma is in a situation where we are in total compliance today but with the passage of this, all 77 counties would be out of attainment.

Senator Boxer. Mr. Chairman, if I could just thank the colleagues before you leave. I just wanted to make a point.

You were very eloquent about you do not want to pay the price for pollution that comes from elsewhere. There is a whole set of exceptional event rules that the EPA has which they are updating. I hope you will take a look at it because that might satisfy you. You make a very important point.

They say "They have ways to exclude the impacts of other pollution." I just wanted you to know that.

Senator Inhofe. Thank you, Senator Boxer.

Senator Boxer. Thank you.

Senator Inhofe. We would ask all the witnesses to come to the table.

Mr. Kanathur "Kanti" Srikanth is Director, National Capital Region Transportation Planning Board, Metropolitan Washington Council of Governments. Michael McKee is Chairman of the Uinta

County Commission. The Honorable Gary Moore is Judge/Executive, Boone County, Kentucky and President, National Association of Regional Councils. Gregory B. Diette, MD, MHS, is Professor of Medicine, Epidemiology and Environmental Health Science, Johns Hopkins University. Larry Greene is Executive Director, Sacramento Metropolitan Air Quality Management District. It is nice to have all five of you here.

We will go ahead and start. We do have a request from one of our members who happens to be the leader of the Senate who wants to participate in the introduction of one of you. We will stop when he comes in.

We will recognize you now, Mr. McKee.

STATEMENT OF MICHAEL MCKEE, CHAIRMAN, UINTA COUNTY COMMISSION

Mr. McKee. Mr. Chairman, and members of the Committee, I am Michael McKee and I serve as the Chairman of the Uinta County Commission located within the Uinta Basin in eastern Utah.

I am honored to testify before the Committee today to discuss the issues we face in controlling ozone levels in the Uinta Basin, especially the unique occurrence of high winter ozone levels.

Only two places in the Nation experience high levels of winter ozone: the upper Green River Basin in Wyoming and the Uinta Basin in Utah. High winter ozone levels are a result of a complex mix of geographic, meteorological, and emission conditions.

Primarily, winter ozone levels rise when snow cover and multi-day temperature inversions occur. An inversion is what occurs when high level warmer air traps low level cold air inside the Basin. Snow reflects the sunlight back up to the cloud cover and this becomes the perfect mix to allow pollutants close to the surface to build and react to produce ozone. In the absence of these conditions, exceedences of EPA's ozone standard have not been observed.

Although it is clear that our oil and gas industry contributes to ozone precursors through the release of NOx, VOC and formaldehyde, those same releases do not create high levels

of ozone absent precise weather conditions.

The county, the State of Utah, the Ute Tribe and industry have spent several years and millions of dollars to study, monitor, and model winter ozone. After all of this work, what we know for sure is that we need several more years of scientific research and monitoring to insure that investments we make are effective and that we have a precise model in order to formulate an appropriate regulatory structure.

We are currently under the threat of nonattainment under current EPA ozone standards. However, not the State, the EPA, nor the county understand what measures would be effective to reduce elevated winter ozone episodes.

Even if EPA were to force the Uinta Basin into nonattainment, absent several additional years of scientific studies, monitoring, and modeling, a State implementation plan would unlikely be effective, yet would devastate our economy by implementing a regulatory scheme at great cost to industry and perhaps with few results.

The proposed lowering of the ground level ozone standard would of course make our situation nearly impossible to avoid nonattainment status, yet would do nothing to improve our air quality.

The Clean Air Act simply does not contemplate the multifaceted nature of winter ozone nor does it provide the

necessary tools to deal with the issue.

Uinta County wants to improve our air quality. That is not a debate. Our oil and gas industry is willing to make major investments to reduce emissions controls but will only do so if these investments are recognized and credited by EPA.

In the case of the Uinta Basin, we need more scientific resources dedicated toward the problem and we need flexibility to implement regulatory actions to determine the most effective controls to improve our air quality.

The oil and gas industry is responsible for 60 percent of our economy and 50 percent of our jobs. We need this industry to stay in the Uinta Basin to feed our economy and provide the resources necessary to tackle our ozone problems. Under non-attainment, the industry and their investment will simply relocate to other areas if not to other countries.

Mitigating winter ozone requires new authorities and opportunities for collaboration between State, tribal and local governments.

A lower ozone standard does not improve our air quality. It simply ties our hands and prevents Uinta County and areas from the west where we have high elevations opportunities to find creative solutions.

I would ask the committee to explore new authorities and look to successful efforts that have actually improved air

quality. I would draw the committee's attention to the Early Action Compact process that the EPA implemented in early 2000 and was very successful but litigation forced the agency to withdraw the program.

The Early Action Compact program allowed several communities to comply with ozone standards in a very short time. The program allowed communities and States to enter into agreements with the EPA to implement actions in a creative fashion that proved to be very effective and the majority of communities that participated in the program were able to lower ozone levels to within the federal standard.

The program required the achievement of milestones, reporting to the EPA, completion of emissions inventories, modeling, and control strategies. Flexibility is a key component to allow communities to implement solutions to air quality issues that are unique to their area.

We believe that an authority similar to the Early Action Compact program with provisions that contemplate the complexities of winter ozone is an appropriate mechanism for communities to improve its air quality without destroying its economy.

We all want to improve our air quality. A lower ozone standard does not achieve that goal. It actually makes it more difficult to achieve. We oppose increasing ozone restrictions

and standards and request the committee to explore new tools in our efforts to improve our air quality. We look forward to working with the Committee toward that end.

I thank you for the opportunity to testify today and thank you for this opportunity. I would be happy to answer any questions or provide additional information.

[The prepared statement of Mr. McKee follows:]

Senator Inhofe. Thank you, Mr. McKee.

I think I failed to say we are going to try to stay within our five-minute limit. Your entire statement will be made a part of the record.

Mr. Srikanth.

STATEMENT OF KANATHUR "KANTI" SRIKANTH, DIRECTOR, TRANSPORTATION
PLANNING BOARD, METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS,
ON BEHALF OF THE ASSOCIATION OF METROPOLITAN PLANNING
ORGANIZATIONS

Mr. Srikanth. Good afternoon, Mr. Chairman.

I want to thank Chairman Inhofe and Ranking Member Boxer
for this opportunity to provide testimony.

I am testifying today on behalf of the Association of
Metropolitan Planning Organizations. I would like to submit my
entire testimony for the record.

I am here to present a practitioner's perspective on the
implications of changes to the existing ozone standards and the
potential issues for transportation planning and programming in
metropolitan areas.

I have no position on where the standards should be set.
Wherever it is set, the MPOs in the Country will have to comply
with it and my MPO, I am sure, will comply with it.

I am the staff director of the National Capital
Transportation Planning Board which is the metropolitan planning
organization, called MPOs, for the Washington, D.C. region.

As you know, MPOs are required to develop transportation
plans and programs for metropolitan areas as a condition of
receiving federal transportation funds. If an MPO is located in
an area that has been designated as nonattainment of EPA's air

quality standards, the MPOs are also required to do something called transportation conformity analysis in order to receive transportation funds from the feds.

I would like to note that my MPO has not taken an official position on the range of the proposed ozone standards.

Senator Inhofe. I am going to ask, if you do not mind, as I mentioned earlier, if you would hesitate for a moment and allow Senator McConnell to introduce our guest from Kentucky. Would that be all right?

Mr. Srikanth. I would be pleased to.

Senator Inhofe. Thank you.

Senator McConnell?

Senator McConnell. Thank you, Mr. Chairman.

I am sorry to interrupt your comments. I appreciate Chairman Inhofe giving me a chance to come by and introduce a friend of many years, a very important public servant in our State, Judge Gary Moore. Gary, I do not know if you have already testified or not.

Judge Moore is the current Judge/Executive of Boone County. In our State, that is like the CEO of the county, like the County Executive they have in Maryland. He was first elected in 1998. In his time as a public servant, he has achieved much success on behalf of the people of Boone County through the application of consistent, conservative policies.

Judge Moore was raised in Pendleton County where his father served as sheriff. Years of watching his father enforce the law and serve the people of his county instilled in Gary a commitment to public service and community involvement.

In addition to serving as the Boone County Judge, he is the current President of the National Association of Regional Councils and serves in the leadership of the National Association of Counties.

Judge Moore is here today to discuss the possibility that EPA may lower the national ambient air quality standards for ground level ozone.

The National Association of Manufacturers issued a report stating this regulation could be the costliest in U.S. history. This regulation would have a serious, detrimental effect on jobs, electricity prices and could have the most devastating impact yet on Kentucky coal jobs.

For these reasons, I am proud to support my colleague, Senator Thune, in his efforts to stop this regulation by co-sponsoring the Clean Air Strong Economies Act.

Judge Moore is uniquely qualified to speak on these matters given his leadership roles in both the National Association of Regional Councils and the National Association of Counties. He has a broad perspective on how this proposed rule would affect not just Boone County but counties across the Nation, rural,

suburban and urban.

He will be able to give a real world perspective on what this proposed rule will mean to folks across the Country who have to deal with the consequences.

I am pleased that my friend, Judge Moore, is here today to share his timely thoughts on this rule.

Mr. Chairman, I really appreciate the opportunity to come by and say a few words about my friend of longstanding. I am sure he will make a positive contribution to your session today.

Thank you.

Senator Inhofe. I am sure he will.

Thank you very much, Senator McConnell.

Mr. Srikanth, you may continue and take a little extra time. I apologize for the interruption but I told you that was going to happen.

Mr. Srikanth. My pleasure. No problem. Thank you.

As I was saying, my MPO has not taken a position on the proposed range of standards for ozone. The Metropolitan Washington Air Quality Committee, the regional air quality planning committee for this area set up under the Clean Air Act, has taken a position.

Its position is that the committee supports the range of proposed ozone standards between the 65 ppb and 70 ppb as being more protective of human health and the environment. The

committee also notes that the standard will pose a fresh challenge to the metropolitan Washington region and believes that it is imperative that the EPA help States and local governments meet the new standards by providing assistance and adopting national rules as part of a national strategy to address air pollution.

A new ozone standard lower than the current level for this region will mean this region will not be in attainment of the new standard. According to the most recent three year average measurements in the region, most of the region's monitors will be exceeding the standards proposed by the EPA.

These readings also indicate that the metropolitan Washington area would need to reduce significant amounts of ozone precursors to comply with the new standards. The transportation sector will certainly have to do its part in achieving these reductions.

My MPO has been conducting transportation air quality conformity analyses since the Clean Air Act amendments of 1990. It is currently classified as marginal, nonattainment of the EPA's 2008 ozone standards which is set at 75 ppb.

The MPO also annually spends something in the range of \$6 million to implement a host of programs explicitly designed to reduce emissions in this region. As a planning exercise, the MPO sets aside 15 percent of its annual budget to conduct the

air quality conformity analysis.

The National Capital Region has significantly reduced emissions over the years. It has attained all of the previous ozone standards and it is on track to attain the 2008 ozone standards within a year or so.

This has really been made possible due to a number of federal control programs supplemented by local land use and transportation investments. These are outlined in my testimony.

The critical thing here is without federal control programs, the region would have had a difficult time attaining those standards. We are very thankful for that.

With all of the actions this region has taken, current analyses show that while the emissions will continue to reduce into the future, beyond 2025, transportation emissions are going to remain steady.

The federal assistance will be very critical, especially in this region which does experience significant amounts of transport ozone coming into this region. The federal assistance should encompass control programs that address the transport in a timely manner.

I would also note the federal assistance should provide some certainty that the timely realization of emission reductions from other EPA programs is made available to regions such as ours.

Additionally, the effects of federal involvement can help by harmonizing and simplifying some of the conformity regulations within the existing law. As always, increased transportation funding to help projects that help reduce emissions is always welcome and needed.

In conclusion, I believe the examination of current ozone standards is needed from the public health perspective. Federal assistance to States, localities and metropolitan areas to help attain the standards is also needed.

I thank you for your time and the opportunity to speak before this committee. I will be happy to answer questions at the appropriate time.

[The prepared statement of Mr. Srikanth follows:]

Senator Inhofe. Thank you, Mr. Srikanth.

Mr. Moore?

STATEMENT OF THE HONORABLE GARY MOORE, JUDGE/EXECUTIVE, BOONE
COUNTY, KENTUCKY AND PRESIDENT, NATIONAL ASSOCIATION OF REGIONAL
COUNCILS

Judge Moore. Thank you, Chairman Inhofe and Ranking Member
Boxer, and all the members of this committee, for the
opportunity to testify on the impacts of more stringent ozone
standards.

I would also like to thank Leader McConnell. What a
pleasant surprise. I was not expecting that.

I am Gary Moore, the elected Judge/Executive of Boone
County, Kentucky and here today representing the National
Association of Regional Councils and the National Association of
Counties.

Boone County is a suburban county in the Cincinnati
metropolitan region. Throughout my region, I hear concerns
about the impact of tighter ozone standards and the effect they
would have on local governments' ambient economy. Similar
concerns have been echoed nationally by regions and counties of
all sizes.

My region is currently classified in marginal nonattainment
but we would be in full nonattainment and face additional
requirements under the proposed rule. Nonattainment
designations impact the economic vitality of local governments,
regions and the Nation.

Areas across the Nation face significant challenges under the current ozone standard. NARC and NACo, along with the U.S. Conference of Mayors and the National League of Cities, have requested that EPA fully implement the current ozone standard before issuing a new, more stringent standard.

Today, I will discuss several on-the-ground impacts of more stringent ozone standards on regions and counties nationwide.

First, local and regional governments play a significant role in protecting local air resources, ensuring a strong transportation system and strengthening the local economic development efforts.

Counties and local governments own a large portion of the Nation's public road system. My county alone owns more than 400 public road miles. Many transportation projects would have to be reconsidered if the ozone standard was tightened.

Additionally, areas designated as nonattainment can have a more difficult time in attracting and keeping industries due to the concerns that their permits and other approvals will be too expensive and even impossible to obtain.

Second, a more stringent ozone standard would create unfunded mandates for State and local governments. EPA estimates that hundreds of counties would be impacted by the new ozone standard.

A more stringent standard would be especially difficult for

rural countries and small metropolitan areas, many of which have not previously been subject to nonattainment designations. Very limited federal funding is available to help these regions and counties comply with air quality standards.

Additionally, the Federal Government can withhold federal highway funds for projects and plans in nonattainment areas which would negatively impact job creation and economic development for these impacted regions.

In 2008, EPA issued the existing 75 ppb ozone standard. In 2010, a more stringent standard was proposed but EPA later withdrew it over concerns about resulting regulatory burdens and uncertainty.

During this period, however, implementation of the 2008 standard was effectively halted. That process was recently restarted. In February of this year, a few months ago, my county received the implementation guidelines for the 2008 standard. Now here we are again discussing a new standard before we know whether the current standard is working.

This process has created confusion in regions and counties and about where they stand under the current standard which is crucial to gauging the effects of an even more stringent standard.

Due to 2014 court decisions, two separate ozone standards must be met as part of the transportation conformity process. A

stricter ozone standard will only complicate matters further.

In conclusion, the health and well being of our residents is a top priority for regions and counties. We urge that EPA fully implement the current ozone standard before issuing a new, more stringent standard.

We look forward to working with members of this committee and the EPA to craft policies and protect public health without inhibiting the economic vitality of our communities.

Thank you again for the opportunity. I am pleased to address any questions you might have.

[The prepared statement of Judge Moore follows:]

Senator Inhofe. Thank you, Mr. Moore, for that excellent statement.

Dr. Diette.

STATEMENT OF GREGORY B. DIETTE, MD, MHS, PROFESSOR OF MEDICINE,
EPIDEMIOLOGY AND ENVIRONMENTAL HEALTH SCIENCE, JOHNS HOPKINS
UNIVERSITY

Dr. Diette. Thank you, Mr. Chairman, Ranking Member and members of the committee for inviting me here. I appreciate the time to talk to you.

My name is Dr. Gregory Diette. I am a practicing pulmonary or lung doctor at Johns Hopkins University in Baltimore, Maryland. To put it simply, my job is to take care of very sick people with lung diseases including things like asthma, COPD and other lung diseases.

You have my written testimony before you and I just wanted to make a few more points with the time that I have.

First of all, ozone pollution is very bad for the lungs. I think it is pretty obvious to most people but I think it is worth repeating. It is a very potent oxidant and when you inhale it, it irritates the lungs and causes people to have symptoms.

There are multiple research studies throughout the United States and the globe that have shown this. They provide a coherent story about what happens when people inhale ozone.

When you get sick from inhaling ozone, there is a range of things that can happen. One can be as simple as having to take more of the medication you are already taking.

In some cases, it means going to the doctor to have an adjustment and in some cases, to the emergency department of the hospital or the ICU. Worse than that, you can die from it. These are very serious issues in terms of the problems people have.

Secondly, something I think gets lost sometimes, because we are talking about vulnerable people, is ozone is bad for normal people too. Normal, healthy people are affected by ozone. If a healthy adult inhales ozone, it affects their lung function and causes inflammation in the lungs. If we have time, I will elaborate on why that is so important.

Another issue is that ozone is ozone, so the person who inhales it does not care whether it came from their city, the nearby county or another State. It is still ozone and it is still irritating.

Another point I wanted to make was about public health. I think public health is a concept that sometimes seems like a high level concept and things get lost in translation. Public health is really a collection of stories about individuals who live in America and what their individual story is and how it contributes to the health issue.

If you think about what happens to someone as an individual, a mother of a child in an emergency room wonders if her child is going to survive that asthma attack, wonders if

they are going to be discharged from the hospital and wonders whether or not she can afford to take off one more day from work in order to take care of her child, when and if he is discharged to go home.

The issue about the symptoms, somebody talks about something like an asthma attack, can seem very abstract, here is what it sounds like when somebody describes it. They say, it feels like there is an elephant on my chest, I cannot breathe, I am panicked, I feel like I am going to die. That is the experience people have. It is not subtle; it is very scary.

The last thing I want to address is the state of the science. I think it is very strong and very compelling. It was compelling in the Bush Administration when the EPA looked at the ozone standard and proposed a standard of 60 ppb. The evidence was supportive of that standard. It has only gotten stronger since 2006 to now.

We have additional information about the adverse effects of ozone on human health. These come from a variety of types of studies, not just one type of study. The EPA has available to it not one study, not ten studies but literally hundreds of studies performed around the United States and the globe to support this idea.

In particular, these studies include necronistic studies, animal studies, toxicology studies, epidemiology studies,

natural experiment studies, met-analyses and others.

I think the evidence is sufficient to say the EPA can and must strengthen the standard for the sake of human health.

Thank you very much. I look forward to answering any questions you might have.

[The prepared statement of Dr. Diette follows:]

Senator Inhofe. Thank you, Dr. Diette.

Mr. Greene.

STATEMENT OF LARRY GREENE, EXECUTIVE DIRECTOR, SACRAMENTO
METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

Mr. Greene. Good morning, Chairman Inhofe, Ranking Member Boxer, and members of the Committee.

My name is Larry Greene, and I am the Executive Director of the Sacramento Metropolitan Air Quality Management District. Thank you for the opportunity to appear here today.

As a military officer for over 20 years, and now as an Air Quality Director for a similar period, I have always taken seriously my responsibilities to protect public interests, formerly through a national security lens, and currently from a public health perspective.

It is with this background that I would like to provide the committee with comments related to our Sacramento experience with the federal Clean Air Act.

In California, meeting the requirements of the federal Clean Air Act has clearly been difficult. California's geography and weather patterns provide optimal conditions for the formation of summer ozone and winter particulate pollution. Whatever the contributing factors, federal designations are based on real public health threats from dangerous levels of air pollution

One of the pillars of the CAA is the establishment of the National Ambient Air Quality Standards, which must be supported

by sound science and set at levels that protect public health with an adequate margin of safety and without consideration of cost or other implementation issues.

The CAA provides for this by establishing the Clean Air Scientific Advisory Committee and mandating a review and revision, only if deemed necessary, of each NAAQS every five years to ensure the standards remain protective of health.

Based on years of direct experience seeing the public health benefits of the Act, we support the Clean Air Act measures. These core principles ensure that public safety is the first filter through which air quality initiatives are measured.

At the same time, we are certainly cognizant of the potential costs of regulatory compliance borne by our local business community. For that reason, we closely evaluate the provisions of EPA implementation rules and guidance documents, provide optimizing comments and have worked hard locally on a range of measures to mitigate and moderate the cost of regulation.

A key measure in reducing monitored ozone and particulate pollution levels has been incentivizing early adoption of cleaner on and off-road equipment. Since 1998, we have provided over \$230 million of State and local funds to businesses in the Sacramento region for purchasing clean equipment in advance of

regulatory deadlines.

We also collaborate with a range of regional partners, including our metropolitan transportation agency to enhance public transportation alternatives. Other programs help schools purchase cleaner vehicles.

For Sacramento, the result tells the story, and it is a positive one. We have attained the original 1994 one-hour ozone standard. We are on track to attain the 1997, 85 ppb standard by the mandated 2017 attainment date.

With continuing support from State and federal programs, we anticipate we will submit a State Implementation Plan, or SIP, next year that will demonstrate attainment of the 2008, 75 ppb standard by the target year of 2027. If EPA takes final action to tighten the 75 ppb standard in October, we anticipate that, as with other standards, we will be successful in meeting this public health goal.

The key message is that meeting NAAQS targets takes committed partnership between local, State and federal agencies. Along those lines, I would like to make a few observations about a new ozone standard, at whatever level it is set.

First, it is important that EPA follow the science and tighten the standards to within a range set by its independent science advisors. Second, the progress we are making to comply with the current 75 ppb standard will bring us that much closer

to achieving any new and tighter standard.

Third, the co-benefits from reducing greenhouse gases can help reduce smog forming emissions and other air pollutants. We already see this occurring in California.

Fourth, there are a number of sources for which federal controls are the most efficient, cost effective and at times, the only avenue available. It is essential that the Federal Government continue to support effective programs for reducing emissions from sources under federal responsibility.

Finally, if Congress wishes to contribute to our success in achieving clean air and public health goals, we urge you to increase federal funding to State and local air agencies to support our work and a wide range of areas related to air quality regulations.

With that, I thank you for inviting me to testify on this critically important issue. I am happy to answer your questions.

[The prepared statement of Mr. Greene follows:]

Senator Inhofe. Thank you, Mr. Greene. Thank all of you for your excellent statements.

We will be having a round of five minutes in the order that our members have arrived, starting with myself and Senator Boxer.

Judge Moore, you heard testimony from Mr. Greene talking about not just the ozone but also CO2 and other emissions. Your Governor is a fine person, I know him, and he is committed to CO2 reductions by 2050.

My observation was that at that time he will be 110 years old, so it is pretty easy to make those commitments. However, I appreciate very much that he has made this commitment and concern and sent this letter to the President of which you are aware.

Gina McCarthy wrote, in a CNN op-ed which I suspect you probably saw, "The agency's air standards will help communities attract new business, new investment and new jobs." Is this your experience in the State of Kentucky?

Judge Moore. We have seen amazing economic growth and job creation in our county. We believe that can best be done by letting the private sector do what it does best. That is to create jobs. We try to keep regulations and requirements off them that might get in the way.

Our Governor has been a great partner with us. We were

just recognized as the number one State per capita in new job creation last year at a recent conference. Our Governor came back home and talked about that.

We work in a bipartisan way to create jobs, build our transportation system, but do that in a responsible way. We were in nonattainment but now we are in moderate attainment. We have done that through good planning.

We have doubled in population in our county since 1990. We have seen new homes, new residential, but also new commercial and industrial development. By planning wisely, protecting our environment and doing that in a way that incorporates multimodal opportunities, more mass transit, bike lanes, pedestrian capacities, we can do that.

To answer your question, these regulations can get in the way of job creation and economic vitality. We feel we are doing quite well in making improvements.

Senator Inhofe. I know you are doing a good job. That was not my question. My question was what these new standards are going to be doing.

I was in the private sector for 20 years. I know what it is like to receive the edicts that come from Washington. That is why we are having hearings like this with people who at home are having to carry out these things.

Your successes are admirable and I appreciate that. If you

are looking down the road and having to come up with these new requirements, is that going to create new jobs?

Judge Moore. No, that would get in the way of new jobs, to answer your question.

Senator Inhofe. Mr. Srikanth, what about your situation? Do you think that would have the effect, as stated, of attracting new business, new investment and new jobs?

Mr. Srikanth. My own experience and expertise falls short of economic development in this region. From a technician's perspective, I can say this region has seen significant growth and economic development. It is forecast to grow a lot more.

Federal help and assistance will certainly be critical to complement and accommodate the future growth. The accomplishments of the past alone will not be sufficient to carry us into the future. The future-needed emission reductions will certainly have to have federal assistance in achieving them.

Senator Inhofe. Do you think with the new standards, there would be a disruption of federal funds, significant cost increases, and new prohibitions on much needed capacity projects? In other words, you will continue to have good successes. Would this be because of or in spite of the new standards?

Mr. Srikanth. My testimony alluded to one of the things

with clean air standards of any pollutant, ozone, particulate matter or others, is transportation has to do its part and do the air quality conformity analysis. If it is not done, then federal transportation funding could be impacted. For areas which will have problems demonstrating attainment, that could impact the timely availability of federal funding.

Senator Inhofe. Mr. McKee, there was talk in all five of the opening statements about the natural conditions in the States that cause elevated ozone levels. What can States do to control such natural events?

Mr. McKee. Really very little, because if you look at the ozone problem, what causes ozone is the closer you get to the stratosphere, the higher those ozone levels are going to be.

In my own area, we are a mile higher, and this is the case in much of the West. In these higher elevations, in particular for summer ozone, there is very little you can do. I do not know that we want to cut down all trees and all vegetation and bury it so that we do not have ozone.

Senator Inhofe. Thank you very much.

Senator Boxer.

Senator Boxer. Thank you.

I wish the whole Country could have seen this panel. You are all so good. There was one star witness, if I could say. You would normally think I would point to my Sacramento friend,

who was pretty good, but I have to say Dr. Diette, thank you.

You are not a politician and you are not a bureaucrat. You came here and you told us the impact of smog on the human body. You told us and did it very, very clearly, exactly what happens. You did not do it in some confusing manner.

You said, ozone pollution is bad for the lungs. That is pretty straightforward. We all have lungs. It is bad for the lungs. You said it irritates the lungs, it causes symptoms. When you have ozone, sometimes in cases you can die from it. You said that. You further said that normal people also are impacted by ozone.

What I loved about my second star, Larry Greene, was his point that he served in the military and he views his job as cleaning up the air and similar to that, protecting the lives of people.

It just confuses me that we would argue over this in light of what you said, Doctor, which I do not think anyone at all would ever refute because they are facts.

I would ask unanimous consent to place in the record, if I might, Mr. Chairman, by the numbers, this shows us the cost of this regulation at the different standard, if it is 70 ppb or 65 ppb. It shows you how many asthma attacks will be prevented, up to 960,000, Mr. Chairman, and 4,300 premature deaths.

Close your eyes and think if it is someone you love whose

lives will be saved. There would be a million days when kids would not miss school, 180,000 days when people would not miss work, and 4,300 asthma-related emergency room visits. Doctor, you expressed that well, of a mother or father panicking and leaving work to rush their child to get help. Also, 2,300 cases of acute bronchitis would be avoided among children.

Everybody else, it is going to be hard. Yes, it is going to be hard. You know what? It is hard. When we passed the Clean Air Act, everybody said the same thing that my dear friend, the Chairman said, the same thing my friend the Majority Leader said, and Senator Thune, a staggering blow to the economy. They used the same words in 1970 and when we reauthorized the Act, the same words.

Mr. Moore, the Honorable Gary Moore, you are very good at expressing your view and you stand for a lot of people in your State. I agree with that, but honest to God, if you really want to look at what happens when there is no regulation on air, look at communist China, look at communist Eastern Europe. They have no regulations. The state did not want any. They did all the business and there were no regulations. People could not breathe. When that wall came down in Eastern Europe, they knew if they wanted economic growth, they had to clean up the air.

I would ask unanimous consent to place in the record the number of jobs that have been created since we passed the Clean

Air Act. Can I do that?

Senator Inhofe. Without objection.

[The referenced information follows:]

Senator Boxer. Thank you very much.

It is very clear that while the aggregate emissions of common air pollutants dropped 72 percent, the U.S. Domestic Product grew 219 percent.

Mr. McKee, earlier this year, a poll in Utah found that 67 percent of voters there stated that air pollution and smog are extremely serious problems facing their State. Are you aware of that poll?

Mr. McKee. I am aware of the information.

Senator Boxer. You are aware of the poll. In 2013, ozone levels in one of your counties exceeded the federal standard on 54 days and concentrations spiked as high as 142 ppb, more than double the level of EPA's rule.

Do you believe air with ground level ozone concentrations of 142 ppb is safe for people to breathe, especially for children?

Mr. McKee. Senator --

Senator Boxer. Can you just say if you think it is safe because my time is running out. I want to ask Dr. Diette if you do not answer it.

Mr. McKee. If I could real quickly, we have spent millions of dollars. Our group did a study with admissions to our local hospital to see what effect respiratory illness had to do with ozone. They did not see any correlation with admissions.

Senator Boxer. You do not think that 142 ppb is safe?

Mr. McKee. We did not see it.

Senator Boxer. What do you think, Doctor?

Dr. Diette. One hundred forty-two ppb is an extraordinary value. It is lethal for people with heart disease, lung disease, diabetes and other conditions. It is a lethal dose of ozone.

Senator Boxer. Thank you. That is enough. It says it all.

We are here to make life better for people, not to fight for the polluters, period, end of quote.

Senator Inhofe. Senator Fischer.

Senator Fischer. Thank you, Mr. Chairman and Ranking Member Boxer.

Judge Moore, in your testimony, you discussed the potential impacts of a lowered ozone standard and state the proposed standard will dramatically increase the number of counties classified in nonattainment.

As you noted, under this proposal, 16 States that currently have no counties in nonattainment would be subject to a new conformity process. This includes my State of Nebraska where 57 out of our 93 counties would be classified in nonattainment. I will note that these are rural, agricultural counties.

Can you speak about the potential costs that State and

local governments will face in order to come into compliance and reach that attainment?

Judge Moore. Yes. Actually, that number, according to our statistics, is if the 70 ppb standard were passed, it would be 358 more counties nationally. At 65 ppb, it would be 558 more counties would be impacted.

We know the challenges that Congress is having with passing a long-term transportation reauthorization. One immediate impact would be in the area of CMAQ funding, congestion, mitigation and air quality funding for transportation, to help improve our transportation system and congestion.

I suspect that those dollars are not going to increase at the same percentage as the number of counties that will be competing for those dollars. Immediately, the program that is supposed to help nonattainment counties become in attainment will be impacted. Right there is an immediate financial impact.

Road projects, as we continue to try to move our communities forward, rural communities depend on highway improvements to get people to jobs and jobs to the people as well as other services.

More regulation will do nothing but delay projects, if not prohibit them, and increase costs. The impact on economic development is dramatic as well because of these similar challenges.

If we saw transportation spending enhancements along with some of these requirements, it could potentially lessen the impact but it will never meet the additional financial impact these standards would have on local governments.

Senator Fischer. Do you know if the EPA has considered or accounted for these costs with their analyses of the rule?

Judge Moore. I have seen their statistics of their estimates and they do not fully capture the total cost that local governments and communities would face.

Senator Fischer. Like Kentucky, Nebraska's counties and our local governments, they own and maintain a very vast road and transportation system. As I pointed out, the counties that will be affected are very rural counties. In Nebraska, it is not unusual to have one person per square mile in many of these areas.

We already see maintenance projects that undergo what I view as a very cumbersome environmental review process and the costs of time involved which means money as well. These counties and the State cannot afford that.

Can you briefly describe the current review process and what you see as burdens placed on our local governments under the proposed ozone rule for counties in nonattainment?

Again, I would just like to say we all want clean air, we all want clean water, but we also need to recognize costs that

are involved on I believe the expansion of the rule where we see areas in nonattainment that have not even met the current rule.

We are talking about an expansion instead of focusing on areas where we need to focus. Let us take care of business. If you could answer that, I would appreciate it.

Judge Moore. We do care about the health of our citizens, obviously. It is a huge responsibility we have.

By the way, in Boone County, Kentucky, we were recently selected as the healthiest county in the Commonwealth. We are very proud of that statistic. We have done that by developing our community in a responsible way. We are working toward the 2008 standards.

The 2008 standards are having an impact. They are improving. We would like to see it play out and see if that does continue to develop. We believe it will. Let's let the 2008 standards play out.

Specifically to your question as to cost, those rural communities that will be added to the list of nonattainment are the counties that can least afford it. They have smaller budgets. Many times they have little to no staff to deal with these added requirements. I think you could see a dramatic impact on progress in those counties.

The modeling that is required to be done, in order to construct or improve a highway system, requires substantial

modeling. My colleague has spoken to the modeling question. Who is going to pay for that additional cost? It is either going to be on the local taxpayers or added to the cost of the project.

As I stated earlier, there already are not sufficient funds to deal with our transportation needs. If you add delays and costs, you are adding additional responsibility to a system that already is not paying for itself.

I really feel for my colleagues in the rural counties that would be asked to try to meet these new requirements. Let's let 2008 play out and continue to make progress and some day discuss where we go from there.

Senator Fischer. Thank you, Judge.

Senator Inhofe. Thank you very much.

I would ask unanimous consent that letters from two Democratic governors, of Virginia and Kentucky, be made a part of the record. Both object to lowered standards.

[The referenced information follows:]

Senator Inhofe. Senator Merkley.

Senator Merkley. Thank you very much, Mr. Chairman.

Thank you all for your testimony. I want to clarify a couple points I found interesting in the discussion.

The first is related to the challenge of complying with potential new standards. It is my understanding that the areas of the Country that have the biggest challenge with ground level ozone would have until 2037, 22 years from now, to comply.

I do not know who would like to respond to that. I just want to clarify that is the case, because I do not think that has really been highlighted in the conversation. Mr. Greene?

Mr. Greene. The worst areas would probably be San Joaquin and South Coast. They would get substantial time and I believe that is correct, sir.

Senator Merkley. Certainly that is a factor in the cost. Virtually all of my home State is in compliance with the new standards. Yet, the cost estimates done by the National Association of Manufacturers said it would take Oregon \$8 billion to comply. How would it take Oregon \$8 billion to comply if Oregon is already in compliance with the standards? Can anyone explain how those costs would be incurred?

I see no answer. If the estimates are so grossly off for my home State, how much are they off for the rest of the Country? The estimates from NAM are so different from the

estimates from EPA that I think we need additional insight from third parties to get an understanding of this.

My understanding is from the EPA side, the health care savings would far exceed the cost to our economy and health care costs are a cost to the economy. Certainly that is something that makes sense.

I was interested in the question of the pollution from China. I have been over to China a couple of times. Anyone who has visited for any length of time, you are probably going to have days you can hardly see the length of a football field. It is not fog, it is pollution.

They had a recent documentary called "Under the Dome" that highlighted the vast impact on the health of the citizens of the Country. It is equal to smoking something close to two packs a day of cigarettes. Our diplomats are reluctant to be there. It does make sense that some of that pollution is making it to the U.S.

While looking that up, the best estimates I could find, the biggest impact in southern California is in lower elevations, 3 ppb to 8 ppb and in higher elevations, 15 ppb. Most of that arrives in the spring, not in the summer when California has the greatest compliance challenge.

Mr. Greene, is that correct?

Mr. Greene. That is correct. It occurs in the spring and

that conforms with the numbers I have seen on California.

Senator Merkley. I tried to find some sense of the contribution from Mexico. I did see the charts that showed no correlation between the areas of the U.S. most adjacent to Mexico or weather patterns that brought that pollution into the U.S. Does anyone have any insight to the direct impact from Mexico? Mr. Greene?

Mr. Greene. Senator, I do know that our southern districts in California do have some significant impacts from Mexico, particularly dust. You would imagine that counties or areas right next to each other would exchange some pollution across the border.

Senator Merkley. Is there a particular time of year that really affects compliance? Is it storms that blow north or certain winds that bring that dust into the U.S.?

Mr. Greene. I would not know that answer, sir.

Senator Merkley. The thing I find interesting is the health testimony. Thank you very much, Doctor, for your testimony. Asthma is a significant concern among my citizens. The other health impacts are substantial.

I like the idea of our planning being based on the science of health impacts. Doctor, could you clarify again, am I understanding from what you are saying that there is a significant difference on health between the current standard

and the proposed standard, that there would be a substantial improvement, reduced health costs and improved quality of life?

Dr. Diette. All of those things are true. One of the reference points that has come up from time to time is about being currently in attainment with the present standard, for example, 75 ppb. For example, the Chairman mentioned that his State, every county, was in compliance.

If you look at another resource, the American Lung Association's website, they have a state of the air statement about different counties. You would see in Oklahoma, for example, every county would get a grade F but for one, which would get a grade D. That is because that is based on science, not regulation.

The science has advanced. Our interpretation of the science has advanced at a much faster pace than the regulation has. People are being harmed by it. It is very clear. I think that is the standard about which we should be thinking, the one that is fully protective of human health as opposed to the legacy of another era.

Senator Merkley. Thank you very much.

Thank you, Mr. Chairman.

Senator Inhofe. Senator Capito.

Senator Capito. Thank you, Mr. Chairman. I thank the Ranking Member and I want to thank the panelists.

Mr. Srikanth, I wanted to ask you to explain to me the threat of conformity in terms of the threat of conformity lapses which could effectively shut off federal highway funds due to the stringency of the standard.

Both in D.C. and around the Country, smaller, more rural MPOs will have significant burden on these MPOs. Can you explain to me the conformity issue? You brought it up in your statement, but could you flesh it out a bit more for me, please?

Mr. Srikanth. I would be happy to, Senator Capito.

The transportation conformity is associated with the Clean Air Act. Metropolitan planning organizations have to follow the rules put out by the EPA on how to conduct this.

One of the key drivers of the transportation conformity rule is when an area is designated as not being in attainment of a standard, they are required to submit what is called a State Implementation Plan, a plan on how that area will attain the standard.

That document, the State Implementation Plan, will identify the amount of emissions from different sectors, from power plants, area sources and transportation. The amount of emissions for transportation listed in the State Implementation Plan is often referred to as the emissions budget.

A metropolitan planning organization's long-term transportation plan is required to be developed in order to get

federal funds. The emissions from all of those projects, at a minimum of 20 years into the future, have to be below these levels in the State Implementation Plan. If it is not, then the plan will not be approved.

The plan has a time limit. If the plan remains not approved, then the plan would lapse. If the plan lapses, the federal transportation funding will not be provided until the plan is corrected.

Senator Capito. To your knowledge, has that occurred under the standards we have now? Do you know of anyone across the United States who has not been in conformity and had their federal highway dollars withheld?

Mr. Srikanth. We have had instances. I will have to get back to you on specifics. I think my colleagues might be able to recall specific jurisdictions. Atlanta certainly comes to my mind.

Senator Capito. Judge Moore, are you aware of any of that?

Judge Moore. From a couple of my colleagues, I believe Atlanta would also be an example of where that has happened.

If I may also comment, the recent court ruling is requiring, in many cases, that modeling of conformity not only be applied to the 2008 standards but also the 1997 standards. You would have to meet both.

If new regulations were passed, there may be three

different standards and models that some regions would have to run in order to make sure we were compliant and eligible for federal funds. There is also that confusion and the overlap that MPOs and regions are facing.

Senator Capito. I would have to add myself to that confusion. Certainly drawing up three implementation plans would be costly.

I think one of you mentioned the amount of your budget dedicated strictly to this issue, a quarter of the budget you are using to measure and make sure you are measuring properly.

I heard a comment that people are advocating for no regulation. I have not really heard that in this committee and I have not heard it from any of the testimony today. I certainly do not believe that to be true.

When you look at what is going on in terms of ozone and put on top of that the Clean Power Plan and EPA possibly looking at redoing their emissions plan for methane, particularly in the western States, we have a lot of oil and gas in the State of West Virginia, it begins to become a burden.

If we have to do three implementation plans and devote all the resources to that, it begins to lack the thing I think Senator Flake was calling for, basically commonsense here. Let us move with commonsense.

Mr. McKee, could you comment on all of the different moving

parts that EPA is going to be putting forward if they are successful with the regulatory environment we see right now?

Mr. McKee. We certainly find it difficult in the area where we are, and as I stated, in the West, because particularly with the lowering of the ozone standard itself, much of the United States will not be able to meet attainment.

If you go down to 70 or 65 ppb, as you realize, ozone itself does not just happen. It is a mixture with VOCs and NOx and that comes together. It just does not happen on its own. As I talked about the trees and vegetation, it is somewhat of a decaying of those products that in summertime elevates those standards.

Then the higher elevation we have, the more difficult it is to be able to correct that. It is very possible, even absent all emissions, we would have significant areas in the United States that would still be in nonattainment.

Senator Capito. Thank you very much.

Thank you, Mr. Chairman.

Senator Inhofe. Thank you, Senator Capito.

Senator Whitehouse.

Senator Whitehouse. Thank you, Mr. Chairman.

I would like to make a few points that I do not think have been made yet.

The first is that the present regulation is one that was

conceived in scandal. To set the present standard, the Bush Administration EPA, under Administrator Johnson, departed from the consistent recommendations of his agency scientists, public officials and the agency's own Scientific Advisory Committee.

The standard then set was inadequate to protect the public, especially children and the elderly, from the harmful effects of ozone pollution from asthma and lung disease. Indeed, it was so inadequate that EPA's own Clean Air Scientific Advisory Committee took the unique step of writing to the then-Administrator to state that they "do not endorse the new primary ozone standard as being sufficiently protective of the public health."

They went on to say that EPA's decision "fails to satisfy the explicit stipulations of the Clean Air Act that you ensure an adequate margin of safety for all individuals, including sensitive populations." That was the finding of the Clean Air Scientific Advisory Committee at the time.

Since then, Dr. Diette, as the science on this gotten clearer or less clear?

Dr. Diette. It has become increasingly strong. There are additional studies in multiple regions of the Country and throughout the world that have strengthened the evidence base. They have also been conducted in the era when the current standard has applied, so it is in an era where there are lower

concentrations of ozone and people are still finding substantial signal for health issues.

Senator Whitehouse. We also know overall that, at least at the 70 ppb standard, the estimated health care savings and benefits, the estimated environmental savings and benefits, the estimated economic savings and benefits from that rule could add as much as \$13 million, whereas the costs would only be \$3.9 billion. It creates a \$10 billion immediate benefit according to those calculations.

The third thing I would like to point out is on the path of Rhode Island. Rhode Island is a downstream State. We are often out of compliance on ozone. We have days in the summer when, as you are driving in to work, what you hear on the radio is the announcer saying today is a bad air day in Rhode Island. Children should stay indoors. Elderly should stay indoors. People with lung or breathing difficulties should stay indoors.

It looks like a beautiful day but it is ozone. Where does the ozone come from? It comes from power plants in the Midwest.

Judge, your State of Kentucky has 22 smoke stacks that are higher than 500 feet. When you build those high smoke stacks, you shoot the pollution, the SOx and the NOx, according to the GAO study, 56 percent of the boilers attached to tall stacks lack scrubbers to control sulfur dioxide and 63 percent do not have controls to trap emissions of nitrogen oxides. As Mr.

McKee just pointed out, those are the precursors to ozone.

You build high smoke stacks, you eject the stuff out of your State, and it goes up into the heat and into the atmosphere. It creates ozone and our kids in Rhode Island have to stay indoors on an otherwise good day.

I do not see how that is fair. I do not see how there is any way in the world Kentucky is ever going to pay attention to that problem when the harm is taking place in Rhode Island.

It is really important, Mr. Chairman, that this be a rule that protects States that are not just pollution-emitting States. We are a downstream State that pays the price of 22 tall smoke stacks.

Let me ask one last question about altitude. We have heard from Mr. McKee a couple of times about the problem of being a high altitude State. Dr. Diette, could you react to that? What is the reality of that?

Dr. Diette. I think there is a lot to know about altitude and regional transport of some of the pollutants. In some cases, pollutants are generated near where they are found and in some cases, they are transported from a distance.

If you think about places like some parts of Utah, for example, where there are thermal inversions, there are pollutants created there that cannot escape into the upper atmosphere. Sometimes that is what happens. Other times, there

is transport from a distance and also ends up there.

I wanted to remark about a point you made because we say it so often that I think it is really remarkable. As you talked about telling kids to stay indoors on a day when there is transport of ozone into their State, that is a remarkable statement.

It is a remarkable thing to have to tell your entire population, today is not a safe enough day for you to go outside and play. If you go outside and play, you have to wait until the sun is down, you have to wait until it is dark when maybe it is safe or not. It is an unbelievable message.

When my patients come to me and say, what can I do about my asthma, one of the things I can say is, I can keep giving you more medications. They say, what about pollution, what can I do and I say, there is nothing you can do. The free market does not change that. You cannot buy a different product and not be exposed to pollution.

This process here, which is the only way to control it in the United States, is to do it at the federal level and try to keep the pollution from reaching them.

Senator Whitehouse. Thank you very much.

Thank you, Mr. Chairman.

Senator Inhofe. Thank you, Senator Whitehouse.

Senator Rounds.

Senator Rounds. Thank you, Mr. Chairman.

Doctor, I appreciated your comments. I have a grandson who has a challenge with asthma. This is something I think all of us care about.

Some of the information you laid out for us today indicates that 140 ppb would be fatal. Could you work a bit backwards from there? I am assuming 100 ppb is still perhaps not fatal but absolutely critical in nature and one that should be attained, a fair statement?

Dr. Diette. That is a great question. I thank you very much for it.

It is not simply a threshold. The reason I reacted to 110 or 120 ppb is that is an extraordinarily high value. It is a value that would set off alarm bells for a region. That is one of the days we would be talking about not having the kids go outside. There is a dose response effect, so we see it even at much lower concentrations than that.

Arbitrarily, investigators choose things like 5 ppb or 10 ppb as an increment but very small increments, even in the lower range, can affect health, even during low increments.

Senator Rounds. What do we call the lower ranges? What are the numbers you have seen studied in terms of lower ranges of ozone?

Dr. Diette. I think the best evidence I have seen comes in

the 60 ppb and higher. There has been a lot of attention to that range between the current standard of 75 ppb and 60 ppb which is the proposed lower bound of the new standard.

Senator Rounds. The reason I ask is that I have a study I would like entered in the record, Mr. Chairman.

[The referenced information follows:]

Senator Rounds. It is a reference out of Atmospheric Environment done by Mr. Emery back in 2011 in which he indicates that a significant amount of the geographic area in the western part of the United States actually has a background of about 70 ppb, apparently not caused by us but simply background.

I am curious, in your studies looking at the sound science side of this, is it even attainable, is it even possible to get to something under a 70 ppb when in those States in which literally there seems to be some pretty sound evidence that is a natural background level?

Dr. Diette. I think you have brought up an important issue which is, what is the background concentration? For one, it is not measurable. You cannot measure it directly, because we do not have the time and the space where there is not manmade contribution to the ozone concentration. The only thing you can do is estimate.

There are different estimates and most of the estimates I have seen are between 20 and 40 ppb. In terms of background, we are talking about a couple of phenomena. Some definitions include transport into an area where it is being measured for another area and others are that being generated by things that have nothing to do with man.

For example, a forest fire, if man had nothing to do with it, that is going to happen anyway, or lightning strikes, things

of that sort.

Seventy parts per billion sounds really high. That is not a value that I have seen reproduced otherwise. I would probably defer to my other colleagues here about what it takes in order to attain standards since that is their expertise and not mine.

Senator Rounds. I am curious. We have used references in terms of the number of packs of cigarettes per day and so forth that an individual would utilize.

If you were to take a reference, if 100 ppb of ozone was comparable to a pack a day, is there relevance to saying it is very important that we bring down ozone from very, very high levels in those areas where there is significant and direct and acute damage being caused?

Are we putting our resources and attention into the right locations by saying we want to work to get everybody to 65 ppb or 60 ppb when in essence we could be saving a lot more lives if we were to focus on those areas such as those in California which have very, very high numbers? Where is our best bet for saving the most lives?

Dr. Diette. You raise a bunch of very important and interesting points. One of the issues I have heard here is ideas such as we should get everyone into attainment first before lowering the other people who are already in attainment.

As a health care provider, that strikes me as very unusual.

To me, the analogy would if we had a new drug that could cure asthma, we would say, you are not going to get it yet because all the people who can benefit from the existing drugs do not have them yet. That is the way it sounds to me.

It sounds as if we are going to keep people who could benefit from benefitting while we are waiting for other people who are not benefitting already to catch up. It seems very strange to me from a health care standpoint. I would not advocate it for my patients.

Senator Rounds. Let me go to Judge Moore for a second. You did not get an opportunity to respond and I thought perhaps you would like to.

When we start talking about NOx and the references with regard to the creation of ozone in your particular State where you have power plants, are you currently in compliance with those standards? What would be your thoughts in terms of the reference our friend from Rhode Island made?

Judge Moore. Thank you for the opportunity. I did want to respond.

Our county is a suburban county. We are not a smokestack county. We are in moderate nonattainment currently because of emissions that are flowing into our county from other parts of the Country.

I think Senator Whitehouse helped make our case that you

are putting regulations on counties that really cannot control the ozone level in their counties. Those rural counties that maybe are reaching levels under a new standard that would require additional costs and regulations, you are putting those requirements on them when it is not going to have an immediate impact or possibly a long term impact on the issue.

I would also differ with him on smoke stacks. I think he is referring to Kentucky Coal and Energy, coal-fired power plants. I do believe there are clean coal technologies that are working and moving forward. The 2008 standards put substantial requirements upon those power companies to make sure they meet the 2008 standards.

Again, we would come back to let's let that play out. Improvements are being made. Let's continue to make those improvements before we put regulations on communities that are not going to have an immediate impact.

Senator Rounds. Thank you.

Thank you, Mr. Chairman.

Senator Inhofe. Thank you, Senator Rounds.

Senator Gillibrand.

Senator Gillibrand. Thank you, Mr. Chairman.

I want to thank our witnesses for testifying today. This is an important topic for my State. There are few, if any issues, more important than the health of our children and the

air they breathe every day.

Now that it is summer, more children will be spending more time outdoors. We know how active young people are when they are outdoors, playing sports, games, and activities. You also know children's lungs and immune systems are still developing, leaving them particularly susceptible to the negative health effects of increased ozone layers.

In fact, a 2010 study conducted in New York City found that ozone associated with warmer weather aggravates children's asthma leading to severe asthma attacks that could have been avoided. Asthma rates are rising in our young people. They are missing school days and emergency room visits for respiratory distress are on the rise.

I introduced legislation last month, the School Asthma Management Plan Act, to assist schools in helping young people when they have asthma attacks. I am committed to taking active measures to make the air that we breathe safer for the whole population.

There is significant evidence that lowering the ozone standard will do that. I applaud the EPA for heeding the science and proposing to strengthen the ozone standard to be more protective of public health.

The cost of inaction is immense, increased number of hospital visits, increased health care costs, even premature

death. The current value of 75 ppb of ground level ozone is outdated and does not reflect the current science.

I would like to ask Mr. Greene and Dr. Diette the following. The EPA has an air quality alert system that allows caregivers to easily determine if the air quality is safe for kids to play outside. We talked about that earlier.

For children who have compromised immune systems or preexisting respiratory conditions like asthma, this alert system is very important. Air Quality Index values are reported daily and fall into the following levels: good, moderate, unhealthy for sensitive groups, unhealthy, very unhealthy and hazardous.

I assume both of you are familiar with the alert system. Under this current system, an ozone level of 75 ppb or higher is considered unhealthy for sensitive groups. Based on the current standard, do you think families are being sufficiently informed and protected against the dangers of air quality on a given day?

Dr. Diette. I think there is a bunch that is important in what you mentioned which is the alert system is based on acute spikes. That means today is a bad day or tomorrow is about to become a bad day and you should take care.

That is also part of the story. There is chronic exposure and acute exposure. There is increasing evidence that chronic exposure, even at lower levels than would set off the alarm

bells, are harmful to people with preexisting diseases like cardiac disease and respiratory diseases.

The spikes you talked about are very important. It is a good alert system, but it does not mean you would want that system to have to be in place. The ideal is to not have those spikes coming so there would not be those dangers.

Telling people to not go outside is not fully protective. Ozone comes inside from outside. All pollutants come inside from outside.

Senator Gillibrand. The CDC reports 1 in 11 children and 1 in 12 adults have asthma. This costs the United States economy about \$56 billion a year. More specifically, for a family with a child suffering asthma, the cost is at least an additional \$1,000 in health care charges a year.

Over the last decade, the proportion of people with asthma in the U.S. grew by 15 percent. How does poor air quality further impact those who suffer from asthma?

Dr. Diette. Someone who has already developed asthma is a vulnerable person. Since you have been talking about children, children born prematurely also, there is a strong signal that whether or not they go on to develop asthma, they also are a vulnerable subset. Children born early or prematurely are vulnerable.

Ozone is a very provocative substance. It is an oxidizing

substance that irritates and bothers the airways of someone with asthma so it can provoke an attack.

Senator Gillibrand. I am also concerned about extended exposure. Can you describe why children, in particular, are among the most vulnerable to elevated ozone levels and are health impacts for children exposed to this type of pollution long lasting?

Dr. Diette. Kids are different than adults in a lot of ways. One is that they tend to be outside playing, for example. When you are outside playing, you breathe more, so you breathe deeper and you breathe more frequently, so you inhale more of whatever it is that is around you. That is one of the reasons.

Also, their lungs are developing. One of the goals in life, if you are thinking about your lungs, is to grow your lungs to the biggest they will ever be, which happens by about your twenties.

Things that interfere with that are a problem because you do not get as good a lung function to start your adulthood. We all lose lung function after that.

Part of it is an issue about what is aggravating at the moment. Another is trying to grow your lungs to the biggest they can be.

Senator Gillibrand. Thank you, Mr. Chairman.

Senator Inhofe. Thank you, Senator Gillibrand.

Senator Barrasso.

Senator Barrasso. Thank you, Mr. Chairman.

Dr. Diette, in the Journal of Pediatrics, 2004, you conducted a study with a host of other authors entitled, Emotional Quality of Life and Outcomes in Adolescents with Asthma. The study, in its conclusion, says, "Adolescents reporting worse asthma specific emotional quality of life reported more frequent school absence, doctors' visits for asthma," also poor asthma-specific emotional quality of life was strongly related to worse asthma control. What causes specific emotional quality of life issues?

Communities and businesses across the Country are telling us counties that are designated as in noncompliance with this new ozone standard will see construction jobs and economic activity grind to a halt. It has been mentioned according to a story from the National Association of Manufacturers, EPA ozone rules could cost up to 1.4 million jobs.

Based on your research, what would be the impact to children with asthma in communities that have high unemployment, chronic high unemployment due to joblessness?

Dr. Diette. That is quite a string of events you are connecting.

Senator Barrasso. I am connecting parents that are more likely to be alcoholic, more likely to have problems of

substance abuse, spousal abuse, all related to chronic unemployment based on positions of this Administration going after jobs for hardworking Americans.

I think it is not a string of events. I practiced medicine for 25 years. I have taken care of lots of families under chronic, long-term unemployment and know the health of those families is documented as worse and the stresses on those children are worse and aggravated.

Did you say I am right? Is that what you said? Did you say I am right?

Dr. Diette. Yes.

Senator Barrasso. Thank you.

Dr. Diette. Excuse me, though. You brought up a good point about the study because the report you talked about was one of several that came from that particular study.

Another one in that same series was also looking at the impact of poorly controlled asthma on subsequent school attendance and parents attending work.

If you are going to string all these things together, I think you need to be careful to look at the entire chain of events. When someone's asthma, particularly a child's asthma, is aggravated, just like any other illness that a child has, it impacts the family immensely. That means when you talk about jobs, if that is your target, mom or dad is not going to work

the next day after there is an asthma attack.

Senator Barrasso. Mom and dad are not going to work because they are one of those 1.4 million who have lost their job as a result of this policy.

Dr. Diette. It does not matter what industry an asthmatic is in, if they are sick, they cannot go to work. That is true for adults and it is true for the parents of the children who are sick.

I think that is the important point. You are right that we are not just talking about jobs in one sector. We are talking about jobs across the United States, if you are talking about the impact of the millions of days of work days lost.

Senator Barrasso. We are talking about jobs that are lost as a result of a policy by an Administration and the impact on the families impacted by the loss of the job and the chronic unemployment that comes with this.

Certainly I think it worsens quality of life across the board. Johns Hopkins has done studies to that effect. It affects peoples' income levels if they are not working.

Dr. Diette. To be clear, my studies do not look at the issue you are bringing up. It does not look at the issue of that chain of events.

Senator Barrasso. Emotional quality of life, you would agree, is impacted if families are out of work? If dad or mom

do not have a job, take-home pay has gone away, then there are subsequent things that happen in those families and impacts the quality of life not just the person who lost the job but the whole family?

Dr. Diette. That is true.

Senator Barrasso. Mr. McKee, activist groups, like the Sierra Club, are pursuing aggressive strategies to support extreme reductions in ozone. They are encouraging the EPA to go as far as they can with their ozone rule.

Last week, Politico ran a story entitled, Inside the War on Coal: How Michael Bloomberg, Red State Businesses and Lots of Midwestern Lawyers are Changing American Energy Faster Than You Think.

The author highlighted the Sierra Club has now launched their beyond natural gas campaign to begin to eliminate natural gas from our electric grid. On the website, the Sierra Club says, "Increasing reliance on natural gas displaces the market for clean energy, harms human health," blah, blah, blah.

My question is, under the EPA's ozone rule, if they listen to these outside groups and put forward a strict standard, is there a likelihood that natural gas development, which the Sierra Club is against, will be under threat?

Mr. McKee. It definitely would be. We can see what has happened with coal. Natural gas is the next target. Natural

gas is the clean carbon fuel that we are using today. Yes, we are very concerned about that.

Senator Barrasso. Thank you, Mr. Chairman.

Senator Inhofe. Thank you, Senator Barrasso.

Senator Carper.

Senator Carper. Thank you all for being here.

When I was governor of Delaware, we launched a mentoring initiative urging companies to adopt kids as mentors, high schools to adopt elementary schools and we recruited about 10,000 mentors. I was one of them.

I started mentoring a young man when he was in the fourth grade until he graduated from high school, ready for this, at the age of 20 and a half. He missed a lot of school growing up. So did his brothers.

One of the reasons he missed a lot of school was because he had asthma. He had a hard enough time coping even when he was going to school regularly, sitting in class and had an even harder time when he was not there. It was hard on his mom having to support five kids, five boys, working and trying to do her job and be a nurse as well.

I just wanted to share that with my friends. This is real. We do not just make up this stuff. It really does happen.

Mr. Greene, a retired Navy Captain, thank you for your service.

My understanding is EPA already has regulations in the works to help States reduce ozone. If these rules are not delayed, hopefully they will not be, we are likely to see, I am told, somewhere between 9 to maybe as many as 59 counties in nonattainment outside of California in 2025. Those are the numbers I have been given, 9 if the standard was set at 70 ppb and could be as high as 59 if the standard was set at 65 ppb. Can you confirm that for me? Does that sound right?

Mr. Greene. I cannot confirm that, sir.

Senator Carper. That is fine. I will. Thank you.

Many of these counties would have to do more to find reductions, these 9 to as many as 59, depending on what the standard is but the majority of America will meet the standards that are proposed.

If this is not your understanding, how important are federal rules to help States reduce ozone? Whether it is 9 or 59 counties outside of California in 2025, how important are federal rules to help States reduce ozone?

Mr. Greene. I think the point made earlier was really critical, that what we have here is clear evidence that public health is impacted by ozone at a level that is lower than the standard. That occurs across many parts of the U.S., many of which are in attainment and many have that problem.

You have citizens across the U.S. with impacts that the

EPA, doctors and much research has shown that their health is impacted. Yet, they are told they are in attainment areas and their air quality is fine. From our perspective in our district, we are a public health agency and are there to protect the public. We follow the science, work very closely with our business community and have been very successful.

Our economy is doing well. We are building a new basketball stadium, so lots of good things are happening in Sacramento, but we are severe nonattainment area. We will be for quite a number of years.

We expect to continue with the success we have had for our business community. We work with our NT on a regular basis. We do very well. We are using up our federal money but we are doing it in slightly different ways than we used to because of the conformity issues, but they are in conformity and we are doing fine.

Senator Carper. Thank you.

I have one quick question for Mr. Srikanth. You mentioned in your written testimony that federal efforts should include "timely enactment of implementation rules and guidance for all new standards."

Does this mean you are not supportive of any delays in EPA's proposal for a new health standard or delays in EPA's efforts to help States address ozone pollution across State

boundaries such as stronger vehicle standards on emissions?

Mr. Srikanth. In my testimony, I am referring to a current set of emission controls that the EPA has promulgated. Within the transportation sector, there is one that addresses vehicle emissions called the Tier 3 standards. There is the fuel the vehicle uses, low sulfur fuel.

Those have been enacted. They have just been enacted. The Tier 3 standards go into effect on a rolling cycle between model years 2017 and 2025.

It is important that one, the implementation and benefits from those control programs realized so regions depending on those to demonstrate attainment can do so. There should not be any delay.

Similarly, for transport pollution, EPA is currently working on another rule. That needs to be enacted in a timely manner so that the regions can realize those benefits and then attain the standards. At the end of the day, it is very important to attain those standards for public health reasons.

Senator Carper. Thank you all for being here.

Thank you, Mr. Chairman.

Senator Inhofe. Senator Markey.

Senator Markey. Thank you very much, Mr. Chairman.

Senator Markey. The Clean Air Act mandates that we protect public health from known threats based on science and the

science is clear that the current ozone level should be lowered. Whenever it becomes clear that new actions are needed to protect public health, opponents of the actions use the same old arguments.

Before the 2008 ozone standard was finalized, we heard this standard would cripple the economy, but this was just not true. In Massachusetts, both air quality and our GDP increased even as the ozone standard tightened. Our GDP increased significantly.

A new ozone standard will require changes in some industries. America is a Country of problem-solvers. Pollution is a problem that we can solve. As a State downwind of most of the rest of the Country, it is critical that we have national standards that create solutions to a national problem. Massachusetts cannot solve the problem alone.

My first question is to Dr. Diette. There were 20 studies cited in your testimony on the health hazards of ozone, all published in an eight year timeframe, all adding to the mounting justification that the current ozone standard must be lowered to protect public health.

Given the pace of scientific research on the health impacts of pollutants, do you believe changing the assessment period of a new standard from every five years to every ten years would have a negative impact on public health protections?

Dr. Diette. I think it sure could. It depends upon which

pollutant we are talking about or which substance in general, but you are right that the science does change. I think we should reevaluate what the science tells us periodically. If we allow a whole decade to go back, that may be too long.

Senator Markey. Mr. Greene, you said with adequate compliance times and good partnerships among government agencies and the business community, Sacramento is on track to meet the ozone standards within your compliance timeframe. Under the pressures of our national ozone standards, your region has made significant progress cleaning up its smog problem even with the unusual population and geographic challenges that promote ozone buildup.

Do you agree waiting until a past standard has been met to set a new standard would weaken the momentum of clean air innovation?

Mr. Greene. I think the biggest place that is going to impact is in our area, 80 percent of the pollution comes from mobile sources. That occurs more and more as we get further into the ozone problem around the Nation.

You are not only impacting the health of people around the Nation where they should be protected by the Clean Air Act, but you are also slowing down other regulations on vehicles, planes, trains and automobiles, for example, that would help those areas that are in nonattainment.

Senator Markey. Dr. Diette, I will come back to you, if I can. The national ozone standard has real world impacts on the health of kids, workers across our Country, hospitalization, and even deaths caused by ozone pollution.

If the ozone standard was set at 60 ppb, do you believe a significant number of deaths and life threatening respiratory events could be avoided?

Dr. Diette. I do. I think there is really good evidence for it, both from the observation of the evidence that at very small increments of ozone, there are measurable increases in death rates from a variety of conditions.

I could refer you to a very good article from Berman and colleagues in Environmental Health Perspectives in 2012 which provided an estimate of what would actually happen if everyone came into compliance with the 75 ppb which would improve mortality but showed successively greater benefits from dropping to 70 ppb and to 60 ppb.

Senator Markey. In 1900, the average age of death in the United States was 48 years of age. We have gone from the Garden of Eden to 1900, when the average age of death in the United States was 48 years.

Then we began to implement public health policies, clean air, clean water, safe meat, and safe drinking water. The meat industry did not like it. They said it was going to kill jobs

and the industry.

The truth is whether it be the automotive industry or the meat industry, you name it, these new standards wound up extending life expectancy in the United States to 79 years of age, 31 years of bonus life that has been added to the average American just in the last 100 years with these public health interventions.

What value do you put on that, seeing your grandmother, seeing your grandfather live to an older age, knowing that young children do not die from the things that used to cause death in our Country? What value do you put on that?

Yet, we do it simultaneous with having a robust economy in our Country with unemployment actually going down right now. It has been going down since we began the recovery from the economic collapse created completely unrelated to any clean air, clean water, or safe drinking laws in our Country. It was economic malfeasance on Wall Street that caused it.

In each one of these instances, we see that innovation develops new catalytic converters, new ways of generating energy, and new ways of solving the problem are developed once Americans are told there is now a requirement that we must innovate. I would say this is just going to be one more instance where that occurs.

Thank you, Mr. Chairman.

Senator Inhofe. Thank you, Senator Markey.

That will conclude the number of individuals here. Senator Boxer would like to have an additional two minutes and I would also.

Senator Boxer.

Senator Boxer. Thank you, Mr. Chairman.

No one has refuted Dr. Diette's simple eloquence on the dangers of smog, no one. You all respected that.

The argument is, cleaner air means fewer jobs. As Senator Markey said, and as I have proven with my documents, that is so much baloney. It is disproven by the facts. The facts are, as we clean up the air, more jobs are created.

Everyone knows California is a leader on environmental matters. We are. I am going to ask unanimous consent to place in the record, today's San Jose Mercury News, Jobs in the Region Nearing Record. It underscores what my friend from Sacramento said.

[The referenced information follows:]

Senator Boxer. To sit here and say there are going to be no jobs and no development as you meet the standards is totally false. It is ridiculous. That is why 64 percent of people in our State, Mr. McKee, say, protect us. We are not supposed to protect the polluters. We are supposed to protect the health of the people while ensuring that we have an economically robust society. We have done it over the years.

I ask unanimous consent to place in the record a letter from ten public health groups including the American Lung Association, the Heart Association, the Stroke Association, the Allergy and Asthma Network and others, supporting the EPA rule.

[The referenced information follows:]

Senator Boxer. I also ask that a letter from Colorado supporting the rule, three letters from Maine, six letters from Illinois, a letter from Michigan, four letters from Pennsylvania and four letters from Virginia be placed in the record.

[The referenced information follows:]

Senator Boxer. Mr. Chairman, I thank you so much for this. I know we are at odds on this, but to me, it is so clear what our job is. As a committee, we are the environment committee. We are not the pollution committee. We are supposed to protect people from harmful pollution and do it in a way that is smart.

EPA has developed the numbers. The cost benefit ratio is there. When I listened to Senator Rounds talk about his family member with asthma, I think to myself how lucky he is to be in a position to protect that child and all of America's children.

I thank you so much for this opportunity.

Senator Inhofe. Thank you very much.

Since you were mentioned by name, Judge Moore, is there any final comment you would like to make?

Judge Moore. I would just say that we do care about the health of our community. From early childhood development programs I have started in my community to elderly programming, it is important.

I have three grandchildren that live in my county. I have two grandchildren who live in Senator Boxer's State. We do want them protected.

We are making improvements with the 2008 standard. We are doing it while the economy is growing and the Nation is prospering. We want the opportunity to continue to do that under the 2008 standard because we are doing it right.

Thank you.

Senator Inhofe. Thank you very much.

As I said earlier, in Oklahoma, we are doing it right too, because all 77 of our counties, as I mentioned, are all in compliance now. However, with the standard lowered, all 77 of our counties would be out of attainment.

We appreciate all five of you. It has been an excellent meeting. We appreciate the time and inconvenience you went through to be here. Thank you so much.

[Whereupon, at 11:35 a.m., the committee was adjourned.]